

REMARKS

Favorable reconsideration of this application in view of the above amendments and in light of the following discussion is respectfully requested.

Claims 1-24 are presently active in this application. The present Amendment amends Claims 1, 7, and 8; adds Claims 15-24; and cancels Claims 2, 3, 9 and 10 without prejudice or disclaimer. The amendments find support in the specification and the original claims and therefore add no new matter.¹

In the outstanding Office Action, Claims 1, 3, 5-7 and 9-14 were rejected under 35 U.S.C. § 102(b) as anticipated by Takeda (U.S. Patent No. 6,397,634); Claims 7-9, 11 and 13 were rejected under 35 U.S.C. §102(b) as anticipated by Letemps (U.S. Patent No. 5,226,942); and Claims 1-4 and 6 were rejected under 35 U.S.C. §103(a) as unpatentable over Letemps.

Applicants acknowledge with appreciation the courtesy of Examiner Hoffmann to interview this case with Applicants' representatives on October 19, 2006, during which time the issues in the outstanding Office Action were discussed as substantially summarized hereinafter and also on the Interview Summary Sheet.

During the interview, potential amendments to independent Claim 1 and the addition of new Claim 15 were discussed. In particular, Applicant's representatives discussed changing Claim 1 to recite that the roller moved in a direction parallel to the rolling axis. As noted on the Interview Summary Sheet, Examiner Hoffmann was of the opinion that amending Claim 1 in this manner would appear to define over Takeda and Letemps. Accordingly, Claim 1 has been amended to recite this feature.

¹ See, for example, the originally filed specification at page 4, lines 12-22; page 5, lines 10-25; page 6, lines 15-24; page 22, lines 9-15; and page 30, lines 10-20.

In response to the rejection of Claims 1, 3, 5-7 and 9-14 under 35 U.S.C. §102(b) as anticipated by Takeda, these rejections are traversed, and reconsideration of the rejection is requested.

Claim 1 as amended recites:

A method for positioning a glass plate, comprising:
conveying a glass plate by a roller conveyor including a plurality of rollers, each roller having a rolling axis; and
moving at least one of the plurality of rollers individually in a direction substantially parallel to the rolling axis when the at least one of the plurality of rollers is in contact with the glass plate in conveyance, to position the glass plate so as to conform a posture of the glass plate to a reference posture.²

Takeda fails to teach every element claimed in Claim 1 as presently amended. Takeda describes a bend shaping method for a glass plate using rollers moved vertically independently and driven to rotate independently.³ However, Takeda fails to teach moving at least one of the plurality of rollers individually *in a direction substantially parallel to the rolling axis*. The outstanding Office Action asserts that the movement of roller (64) in Figures 7-9 of Takeda and the roller (23) in Figure 6 of Takeda is “at least partially horizontal.”⁴ Although both roller (64) and roller (23) *rotate in a circular arc about a line parallel to the rolling axis* of each respective roller, and although roller (64) moves *vertically in a direction that is perpendicular to the rolling axis*, neither roller (64) nor roller (23) of Takeda *move in a direction substantially parallel to the rolling axis*, as presently claimed.⁵

Accordingly, as Takeda does not teach every feature recited in Claim 1 as presently amended, Claim 1 patentably defines over the cited art. Therefore, the rejection to Claim 1

² Emphasis added.

³ See, for example, Takeda at column 7, lines 44-45; and column 8, lines 27-34.

⁴ See the outstanding Office Action at page 4, paragraph 11.

⁵ See, for example, Takeda at column 13, lines 13-26; column 14, line 49-column 15, line 14; and Figures 6 and 8.

and all claims dependent therefrom is traversed, and reconsideration of the rejection based on Takeda is requested.

Claim 7 as amended recites:

A system for positioning a glass plate, comprising:
a roller conveyor, including a plurality of rollers configured to convey a glass plate, each roller having a rolling axis; and
means for moving at least one of the plurality of rollers *individually* in a direction substantially parallel to the rolling axis when the at least one of the plurality of rollers is in contact with the glass plate in conveyance, to position the glass plate so as to conform a posture of the glass plate to a reference posture.⁶

Further, Takeda does not teach a “means for moving at least one of the plurality of rollers individually in a direction substantially parallel to the rolling axis” as defined in Claim 7. As discussed above, Takeda describes rotating rollers in a circular arc about a line parallel to the rolling axis of a respective roller, and moving a roller vertically in a direction that is perpendicular to the rolling axis, but does not teach moving rollers in a direction substantially parallel to the rolling axis. Likewise, Takeda describes a means for rotating a roller in a circular arc about a line parallel to the rolling axis of a respective roller, and means for moving a roller vertically in a direction that is perpendicular to the rolling axis, but does not teach a means for moving rollers in a direction substantially parallel to the rolling axis.

Accordingly, as Takeda does not teach every feature recited in Claim 7 as presently amended, Claim 7 is not anticipated by Takeda and patentably defines over the cited art. Therefore, the rejection to Claim 7 and all claims dependent therefrom is traversed, and reconsideration of the rejection based on Takeda is requested.

In response to the rejection of Claims 7-9, 11 and 13 under 35 U.S.C. §102(b) as anticipated by Letemps, these rejections are traversed, and reconsideration of the rejection is requested.

⁶ Emphasis added.

Letemps fails to teach every element claimed in Claim 7 as presently amended.

Letemps describes a method for curving a glass sheet conveyed on rollers. However, Letemps fails to teach moving at least one of the plurality of rollers *individually* in a direction substantially parallel to the rolling axis. The present Office Action recognizes that Letemps describes that a glass sheet can be repositioned by moving *a whole portion* of a conveyor relative to a direction effectively followed by the glass sheet.⁷ Moving a whole portion of a conveyor is not moving at least one of the plurality of rollers *individually* in a direction substantially parallel to the rolling axis.

Accordingly, as Letemps does not teach every feature recited in Claim 7 as presently amended, Claim 7 is not anticipated by Letemps and patentably defines over the cited art. Therefore, the rejection to Claim 7 and all claims dependent therefrom is traversed, and reconsideration of the rejection based on Letemps is requested.

In response to the rejection of Claims 1-4 and 6 under 35 U.S.C. §103(a) as unpatentable over Letemps, these rejections are traversed, and reconsideration of the rejection is requested.

The outstanding Office Action states that although Letemps did not teach a method in which the roller group (17) was moved while in contact with the glass in conveyance, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to move the rollers (17) as such because it would have permitted the conveyance of the glass sheet to proceed uninterrupted. However, even if this modification were proper, moving the roller group (17) of Letemps while in contact with the glass in conveyance would not teach every element claimed in Claim 1 as presently amended. As discussed above, Letemps does not teach moving at least one of the plurality of rollers *individually* in a

⁷ See outstanding Office Action at page 3, paragraph 9; and Letemps at column 7, lines 33-47 and Figure 2.

direction substantially parallel to the rolling axis. Claim 1 recites “moving at least one of the plurality of rollers individually in a direction substantially parallel to the rolling axis.”

Accordingly, as modifying Letemps to move the roller group (17) while in contact with the glass in conveyance does not teach or suggest every feature recited in Claim 1 as presently amended, Claim 1 patentably defines over the cited art. Therefore, the rejection to Claim 1 and all claims dependent therefrom is traversed, and reconsideration of the rejection based on Letemps is requested.

New Claims 15-24 are supported at least by the claims as previously presented, particularly Claims 1 and 7 as originally filed, and the originally filed specification at page 4, lines 12-22; page 5, lines 10-25; page 6, lines 15-24; page 22, lines 9-15; and page 30, lines 10-20.

New Claim 15 recites “pivoting at least one of the plurality of rollers individually around an axis substantially perpendicular to both the conveying direction and the rolling axis.” By contrast, Takeda describes rotating a roller in a circular arc about a line *parallel* to the rolling axis of a respective roller and *translating* a roller vertically in a direction that is *perpendicular* to the rolling axis, and Letemps describes moving a *whole portion* of a conveyor. Thus, neither Takeda nor Letemps teach or suggest *pivoting* at least one of the plurality of rollers *individually* around an axis *substantially perpendicular* to both the conveying direction and the rolling axis as recited in new Claim 15. Therefore, new Claim 15 and new Claims 16-20 depending therefrom patentably define over Takeda and Letemps.

New Claim 21 recites “means for pivoting at least one of the plurality of rollers individually around an axis substantially perpendicular to both the conveying direction and the rolling axis.” As discussed above, neither Takeda nor Letemps teach or suggest pivoting at least one of the plurality of rollers individually around an axis substantially perpendicular to both the conveying direction and the rolling axis as recited in new Claim 21. Additionally,

neither Takeda nor Letemps teach or suggest a means for performing this feature. Therefore, new Claim 21 and new Claims 22-24 depending therefrom patentably define over Takeda and Letemps.

Additionally, new Claims 15 and 21 recite subject matter that further patentably defines over Letemps. Claims 15 and 21 recite, *inter alia*, “pivoting at least one of the plurality of rollers individually around an axis substantially perpendicular to both the conveying direction and the rolling axis **when the at least one of the plurality of rollers is in contact with the glass plate in conveyance.**” As explained in the specification as originally filed on page 3, lines 4-21, changing the posture of a glass sheet while conveying it so as to position the glass sheet having no contact with a positioning member is believed to be unique. In the past, it was common to position a glass sheet by contact with a positioning member or to position a jig in conformity with the position of a glass sheet. In one embodiment described in Letemps, a high speed camera and a computer are used to determine an angle of or amount of transverse shift of a glass sheet in conveyance.⁸ The position of a curving tool is then adjusted to compensate for any shift in position by the glass.⁹ Another embodiment of Letemps describes moving a whole portion of the conveyor relative to a direction effectively followed by a glass sheet.¹⁰ In other words, Letemps describes moving a jig **not in contact** with a glass sheet to change a conveying direction of a glass sheet that is later conveyed over the jig. It follows that Letemps does not disclose changing the posture of a glass sheet while conveying it so as to position the glass sheet having no contact with a positioning member. Therefore, Letemps does not teach or suggest pivoting at least one of the plurality of rollers individually around an axis substantially perpendicular to both the conveying direction and the rolling axis **when the at least one of**

⁸ See Letemps at column 6, lines 38-61.

⁹ See Letemps at column 6, line 62 – column 7, line 10.

¹⁰ See Letemps at column 7, lines 33-47 and Figure 2.

the plurality of rollers is in contact with the glass plate in conveyance, as presently claimed. Therefore, new Claim 15 (and all claims dependent therefrom) and new Claim 21 (and all claims dependent therefrom) patentably define over Letemps.

Consequently, for the reasons discussed in detail above, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal allowance. Therefore, a Notice of Allowance for Claims 1-12, and 15-21 is earnestly solicited.

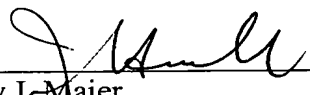
Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact the undersigned representative at the below listed telephone number.

Respectfully submitted,

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